

# Comparison of Rapid Urease Test and Real Time Polymerase chain reaction to Detection of Helicobacter Pylori in the Gastric Biopsy

**Background & Objective:** Helicobacter Pylori is a major human pathogen and is a risk factor for atrophic gastritis, gastro-duodenal ulcers, and gastric cancer. There are many other diagnostic Methods available for detecting this microorganism, each has several advantages and disadvantages. The aim of this study is comparing Real Time PCR with Rapid Urease Test to detect Helicobacter Pylori in gastric biopsy in patients with dyspepsia.

**Material & Methods:** 121 patients with gastritis, underwent gastrointestinal endoscopy and a gastric biopsy was taken from each patient. Rapid Urease Test was done in selective agar media, then Real Time PCR was performed with a specific primer for Urease C on the same specimens .

**Result:** In this study PCR Method was selected as a gold standard test. The sensitivity and specificity of Rapid Urease Test was 70% and 95.5% compared to PCR.

**Conclusion:** PCR is the gold standard test for diagnosis of Helicobacter Pylori infection and it is commonly used as its diagnostic test.

**Key Word :** Helicobacter Pylori, Rapid urease test , Polymerase chain reaction